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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:)
BRADY REUBEN DAVIES) Confirmation No. TBA
Serial No. 10/590954) Group Art Unit: TBA)
Filed: August 28, 2006) Examiner TBA)
For: Selective Bonding for Forming a Microvalve) Attorney Docket 1-24871)

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

INFORMATION DISCLOSURE STATEMENT

Honorable Sir:

Pursuant to 37 C.F.R. 1.97(b), record is hereby made of information that the Patent Office may wish to consider in connection with its examination of the above-identified application. A completed PTO/SB/O8 form is enclosed along with copies of any such information with the exception of U.S. patent documents. As of the date of mailing of this paper a first office action on the merits has not been mailed the above-identified application.

Respectfully submitted,

James D. Schweikert Reg. No. 58,057

MacMillan, Sobanski & Todd, LLC One Maritime Plaza, Fifth Floor 720 Water Street Toledo, Ohio 43604 (419) 255-5900

PTO/SB/08a (07-05)

(SUBSTITUTE FOR FORM 1449A/PTO)

U.S. DEPARTMENT OF COMMERCE PATENT AND THE PATEN

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Sheet 1 of 5 Attorney Docket Number 1-24871

APPLICATION NUMBER	10/590954
FILING DATE	August 28, 2006
FIRST NAMED INVENTOR	BRADY REUBEN DAVIES
ART UNIT	TBA
Examiner Name	TBA
A	1 24971

U.S. PATENT DOCUMENTS

EXAMINER	CITE	DOCMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR	DAGES COLUMNIS I INIES WITHER BET EVAN
INITIAL	No. 1	NUMBER-KIND CODE 2 (IF KNOWN)	MM-DD-YYYY	APPLICATE OF CITED DOCUMBNET	PAGES, COLUMNS, LINES WHERE RELEVAN PASSAGES OR RELEVANT FIGURES APPEAR
		0,886,045	04-28-1908		
		1,886,205	11-01-1932	LYFORD	
		1,926,031	09-12-1933	BOYNTON	
		2,412,205	12-10-1946	Соок	
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		5,054,522	10-08-1991	KOWANZ ET AL.	

EXAMINER

DATE CONSIDERED

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PTO/SB/08a (07-05)

		110/55/000 (07 05)
(SUBSTITUTE FOR FORM 1449A/PTO)	APPLICATION NUMBER	10/590954
U.S. DEPARTMENT OF COMMERCE	FILING DATE	August 28, 2006
PATENT AND TRADEMARK OFFICE	FIRST NAMED INVENTOR	BRADY REUBEN DAVIES
INFORMATION DISCLOSURE	ART UNIT	TBA
STATEMENT BY APPLICANT	EXAMINER NAME	TBA
SHEET 2 OF 5	ATTORNEY DOCKET NUMBER	1-24871
SHEET 2 OF 5	ATTORNEY DOCKET NUMBER	1-24871

U.S. PATENT DOCUMENTS

EXAMINER	Спте	DOCMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR	PAGES, COLUMNS, LINES WHERE RELEVAN
INITIAL,	No. 1	NUMBER-KIND CODE 2 (15 KNOWN)	MM-DD-YYYY	APPLICATE OF CITED DOCUMBNET	PASSAGES OR RELEVANT FIGURES APPEAR
		5,058,856	10-22-1991	GORDON ET AL.	
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		5,064,165	11-12-1991	JERMAN	
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EXAMINER

DATE CONSIDERED

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PTO/SB/08a (07-05)

	1 10/02/004 (07 05)
APPLICATION NUMBER	10/590954
FILING DATE	August 28, 2006
FIRST NAMED INVENTOR	BRADY REUBEN DAVIES
ART UNIT	TBA
Examiner Name	TBA
ATTORNEY DOCKET NUMBER	1-24871
	FILING DATE FIRST NAMED INVENTOR ART UNIT EXAMINER NAME

U.S. PATENT DOCUMENTS

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EXAMINER	Спте	DOCMENT NUMBER	PUBLICATION DATE	NAME OF PATENTEE OR	PAGES, COLUMNS, LINES WHERE RELEVAN
INITIAL	No. 1	NUMBER-KIND CODE 2 (IF KNOWN)	MM-DD-YYYY	APPLICATE OF CITED DOCUMBNET	PASSAGES OR RELEVANT FIGURES APPEAR
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_		5,838,351	11-17-1998	WEBER	
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(SUBSTITUTE FOR FORM 1449A/PTO)			APPLICATION NUMBER	10/590954		
U.S. DEPARTMENT OF COMMERCE			FILING DATE	August 28, 2006		
PATENT AND TRADEMARK OFFICE		FIRST NAMED INVENTOR	BRADY REUBEN DAVIES			
INFORMATION DISCLOSURE		ART UNIT	TBA			
STAT	EME	INT BY APPLICA	NT	Examiner Name	TBA	
Sнеет 4 (OF 5			ATTORNEY DOCKET NUMBER	1-2487	1
			U.S. PATI	ENT DOCUMENTS	· ·	
EXAMINER	Спте	DOCMENT NUMBER	PUBLICATION DATE	Name of Patentee or		PAGES, COLUMNS, LINES WHERE RELEVANT
INITIAL	No. ¹	NUMBER-KIND CODE 2 (IF KNOWN)	MM-DD-YYYY	APPLICATE OF CITED DOCUMBN	ET	PASSAGES OR RELEVANT FIGURES APPEAR
		2002/0174891	11-28-2002	MALUF ET AL.		
		2003/0092526	05-15-2003	HUNNICUTT ET AL.		
		2003/0098612	05-29-2003	MALUF ET AL.		
		2006/0218953	10-05-2006	HIROTA		
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]	FOREIGN PA	ATENT DOCUMENT	S	
EXAMINER	Сіте	FOREIGN PATENT DOCUMENT	PUBLICATION DATE	NAME OF PATENTEE OR		PAGES, COLUMNS, LINES WHERE RELEVANT
INITIAL	No. 1	COUNTRY CODE NUMBER KIND	MM-DD-YYYY	APPLICATE OF CITED DOCUMBN	ET	PASSAGES OR RELEVANT FIGURES APPEAR
		CODE				
		DE2215526	10-04-1973			
		DE2930779	02-07-1980	TOKYO SHIBAURA ELEC	TRIC	
		DE3401404	07-25-1985	BOSCH GMBH ROBERT (DE)	
		DE4101575	07-23-1992	BOSCH GMBH ROBERT		
		DE4417251	11-23-1995	BOSCH GMBH ROBERT	<u>` </u>	
		DE4417231 DE4422942	01-04-1996	BOSCH GMBH ROBERT	`	
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		EP250948	01-07-1988	FRAUNHOFER GES FORSCHUNG (DE)		U. C. Companyana and M.
				UNIV LELAND STANFOR	D	
		EP261972	03-30-1988	JUNIOR (US)		
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			00.40.000	LUCAS NOVASENSOR (L	JS) et	
		WO00/14415	03-16-2000	al.		
		WO99/16096	04-01-1999	MCNC et al.		
EXAMINER	2			DATE CONSIDERED		

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(SUBSTITUTE FOR FORM 1449B/PTO)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

SHEET 5 OF 5

EXAMINER

	1 10/05/000 (0, 00)
APPLICATION NUMBER	10/590954
FILING DATE	August 28, 2006
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ART UNIT	TBA
Examiner Name	TBA
ATTORNEY DOCKET NUMBER	1-24871

SHEET 5 OF 5		ATTORNEY DOCKET NUMBER 1-246/1
		NON PATENT LITERATURE DOCUMENTS
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
		"A Silicon Microvalve For The Proportional Control Of Fluids" by K.R. Williams, N.I. Maluf, E.N. Fuller, R.J. Barron, D.P. Jaeggi, and B.P. van Drieënhuizen, TRANSDUCERS '99, Proc. 10th International Conference on Solid State Sensors and Actuators, held June 7-10, 1999, Sendai, JAPAN, pp. 18-21.
		"Process for in-plane and out-of-plane single-crystal-silicon thermal microactuators"; J. Mark Noworolski, et al.; Sensors and Actuators A 55 (1996); pp. 65-69.
		Ayón et al., "Etching Characteristics and Profile Control in a Time Multiplexed ICP Etcher," Proc. Of Solid State Sensor and Actuator Workshop Technical Digest, Hilton Head SC, (June 1998) 41-44.
		Bartha et al., "Low Temperature Etching of Si in High Density Plasma Using SF6/O2," Microelectronic Engineering, Elsevier Science B.V., vol. 27, (1995) 453-456.
		Fung et al., "Deep Etching of Silicon Using Plasma" Proc. Of the Workshop on Micromachining and Micropackaging of Transducers, (Nov. 7-8, 1984) pp. 159-164.
		IEEE Technical Digest entitled "Compliant Electro-thermal Microactuators", J. Jonsmann, O. Sigmund, S. Bouwstra, Twelfth IEEE International Conference on Micro Electro Mechanical Systems held January 17-21, 1999, Orlando, Florida, pp. 588 - 593, IEEE Catalog Number: 99CH36291C.
		Klaassen et al., "Silicon Fusion Bonding and Deep Reactive Ion Etching; A New Technology for Microstructures," Proc., Transducers 95 Stockholm Sweden, (1995) 556-559.
		Linder et al., "Deep Dry Etching Techniques as a New IC Compatible Tool for Silicon Micromachining," Proc,. Transducers, vol. 91, (Jun. 1991) pp. 524-527.
		Petersen et al. "Surfaced Micromachined Structures Fabricated with Silicon Fusion Bonding" Proc., Transducers 91, (Jun. 1992) pp. 397-399.
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